

**MICROBITS PERIPHERAL PRODUCTS**

225 Third Avenue, SW / Albany, OR 97321

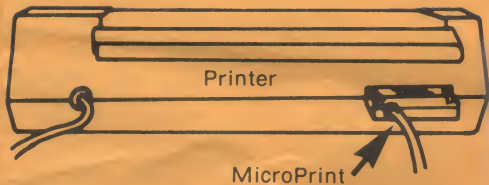
(503) 967-9075

# 1. INTRODUCTION

Congratulations on your purchase of the MicroPrint Parallel Printer Interface. You have wisely chosen a printer interface incorporating the latest state-of-the-art technology to enhance the use of your Atari computer. The MicroPrint is designed to be completely compatible with software written to use the Atari 850 Interface Module. It is also compatible with our MPP-1000C direct-connect modem that does not require the Atari 850. Both of these together make a complete package that will out-perform most of the other products on the market today.

## 2. CONNECTING **MicroPrint**

MicroPrint is designed to work with all Atari computers except the 1200XL, and virtually all parallel printers. It connects to most parallel printers using the 36-pin Centronics connector (Epson, NEC, Star Micronics, etc.). There are adaptor cables available for many of the printers that do not use the standard Centronics connector.



### 3. CONFIGURING YOUR PRINTER

Most printers have DIP switches that allow you to set certain options on the printer. Typically, these switches allow use of different character sets, form length, and other print options. The most common switch that needs changing is one that tells the printer to advance the paper (linefeed) every time it prints the end of a line (carriage return). If the printer prints everything on the same line, then you want to switch it so it does a CR + LF. There may also be other switches that need setting for correct operation. Refer to your manual for more information.

You should always turn your printer off before changing the switches. After setting them correctly, turn the printer back on. If you do not follow this procedure, the printer may not recognize the change.

## 4. SERIAL PRINTER OPTION

MicroPrint has the capability to work with some RS-232 serial printers. This requires an additional adaptor cable. To order an MPP-1156 serial adaptor cable, contact your dealer or Microbits.

Your printer must have the following specifications to work with the MPP-1156 serial adapter:

- 150,300,600,1200,2400,4800,9600 Baud
- 1 start bit
- 8 data bits
- 2 stop bits
- No parity
- RDY/BSY data protocol system using DTR to indicate status
- Printer must accept TTL (0-5 volt) signal levels

## 5. USING **MicroPrint** FROM BASIC

To use MicroPrint with Atari BASIC you simply use the LPRINT instruction like this:

```
LPRINT "This is a test of MicroPrint"
```

If you want to print from BASIC program, you insert a line number before the command:

```
10 LPRINT "Does it work?"
```

See your BASIC Reference manual for more information on using a printer with BASIC.

## 6. **MicroPrint** PIN-OUT

| PIN | SIGNAL        | PIN | SIGNAL              | PIN | SIGNAL              |
|-----|---------------|-----|---------------------|-----|---------------------|
| 1   | Strobe        | 13  | Select              | 25  | Ground (Data bit 6) |
| 2   | Data bit 1    | 14  | Not connected       | 26  | Ground (Data bit 7) |
| 3   | Data bit 2    | 15  | Not connected       | 27  | Ground (Data bit 8) |
| 4   | Data bit 3    | 16  | Ground              | 28  | Ground              |
| 5   | Data bit 4    | 17  | Not connected       | 29  | Ground (Busy)       |
| 6   | Data bit 5    | 18  | Not connected       | 30  | Ground              |
| 7   | Data bit 6    | 19  | Ground (Strobe)     | 31  | Not connected       |
| 8   | Data bit 7    | 20  | Ground (Data bit 1) | 32  | Not connected       |
| 9   | Data bit 8    | 21  | Ground (Data bit 2) | 33  | Not connected       |
| 10  | Not connected | 22  | Ground (Data bit 3) | 34  | Not connected       |
| 11  | Busy          | 23  | Ground (Data bit 4) | 35  | Not connected       |
| 12  | Not connected | 24  | Ground (Data bit 5) | 36  | Not connected       |

## 7. TROUBLESHOOTING

If you have a problem getting MicroPrint to work correctly, check the following items:

1. Computer will not operate with MicroPrint plugged in. MicroPrint is defective. Return to Dealer or MPP.
2. Disk drive or cassette will not work with MicroPrint plugged in. MicroPrint is defective. Return to dealer or MPP.
3. ERROR-138. Is MicroPrint connected properly to computer and printer? Is printer on and selected?
4. ERROR-140. You probably turned your computer off and on too quickly. MicroPrint needs a couple of seconds to properly reset. If you get this error repeatedly, then you may have a defective MicroPrint. Contact your dealer or MPP.
5. Everything seems to work fine, but printer does not print. Is MicroPrint connected to printer properly? Are the printer's DIP switches set correctly? If that doesn't work, you should try the MicroPrint with another printer that is known to work correctly. If that doesn't work, MicroPrint is probably defective and should be returned.

Call our service department at (503) 967-9075 to get a return authorization before returning any merchandise directly to us.



**MICROBITS PERIPHERAL PRODUCTS**

225 W. Third St. / Albany, OR 97321 / (503) 967-9075



## **8. SOFTWARE COMPATIBILITY**

MicroPrint works with all software written to use a parallel printer connected to an Atari 850 Interface Module. If your software does not seem to work correctly with your printer, then there is probably a compatibility problem between the software and the printer.

If you have the AtariWriter word processor and a non-Atari printer, then you may want to obtain the AtariWriter Printer Drive program from the Atari Program Exchange (APX).

## WARRANTY

Microbits Peripheral Products, Inc. warrants the MicroPrint Interface to be free from defects in material and workmanship and to meet applicable specifications under normal use and service for a period of two (2) years after sale to original owner. If any parts have become defective under normal usage rather than misuse, negligence, or accident. Microbits Peripheral Products, Inc. will repair or replace them without charge. This warranty shall not apply to parts or equipment that have been repaired or altered outside our repair facility. Equipment that has been subjected to misuse, negligence, or accident, or that has been altered, defaced, or has the serial number missing is not covered by this warranty. Repairs that are not covered by this warranty will be billed at current shop charges.

Microbits Peripheral Products, Inc. does not assume any liability for any consequential damages caused by the use of the MicroPrint Interface.

225 Third Avenue, SW / Albany, Oregon 97321 / (503) 967-9075